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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,446	12/05/2003	Jose M. Sosa	API-1028US (COS-936)	1024
25264	7590	12/08/2004	EXAMINER	
FINA TECHNOLOGY INC			ASINOVSKY, OLGA	
PO BOX 674412			ART UNIT	
HOUSTON, TX 77267-4412			PAPER NUMBER	

1711

DATE MAILED: 12/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/729,446

Applicant(s)

SOSA ET AL.

Examiner

Olga Asinovsky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 8 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Sosa et al U.S. Patent 6,437,043.

Sosa discloses a process for producing an impact rubber modified polystyrene composition comprising a styrene-butadiene-styrene (SBS) block copolymer and polymerizable vinylaromatic hydrocarbon monomer, column 4, lines 8-67. The final product is transparent, column 1, line 40 and column 4, line 67. The claimed statement that the impact modified polystyrene has a haze value of less than or equal to 12% is equivalent to the transparent resulting polymer as evaluate by the human eye, column 1, line 40. The elastomer concentration can be from 30% to 50%, column 5, lines 61-63. Thus, the styrene content in the block copolymer is readable in the present claim 8.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6-7, 9-17 and 19-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sosa et al U.S. Patent 6,437,043 as applied to claim 1-5, 8 and 18 above, and further in view of Bowen U.S. Patent 5,633,318.

Sosa has been discussed above.

Sosa does not disclose a coupling agent for making a SBS block copolymer, chain transfer agent and a process condition wherein the reaction can be initiated thermally. Bowen discloses styrene resin such as HIPS resin wherein a rubber portion is styrene-butadiene-styrene triblock copolymer, column 4, lines 52-54. The triblock copolymer is dissolving in a styrene monomer and may be in a solvent, column 4, lines 6-8. The polymerization of styrene monomer is initiated thermally, column 3, line 65, or, if needed, an initiator can be used, column 4, lines 30-34, in the presence of a chain transfer agent=mercaptan, column 3, lines 65-67 and column 4, lines 1-2. It would have been obvious to one of ordinary skill in the art to modify a process for producing a polystyrene resin in Sosa's invention by adding a chain transfer agent as disclosed by Bowen, it would be obvious to regulate a molecular weight for obtaining the desired characteristics of the resulting resin. Also, it would have been obvious to one of ordinary skill in the art to use a coupling agent for making a coupled block copolymer in any recited reference for producing a rubber modified impact polystyrene in Sosa and Bowen since any morphology of block copolymer is readable in Sosa or Bowen, and

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since the morphology of block copolymer would not effect on the transparency of the obtained impact modified polystyrene.

There is no applicants' reference with Form 1449.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is 571-272-1066. The examiner can normally be reached on 9:00 to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Olga Asinovsky
Examiner
Art Unit 1711

CP
December 02, 2004


James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700